Initial Results from a Study of the Effects of Meditation on Multitasking Performance

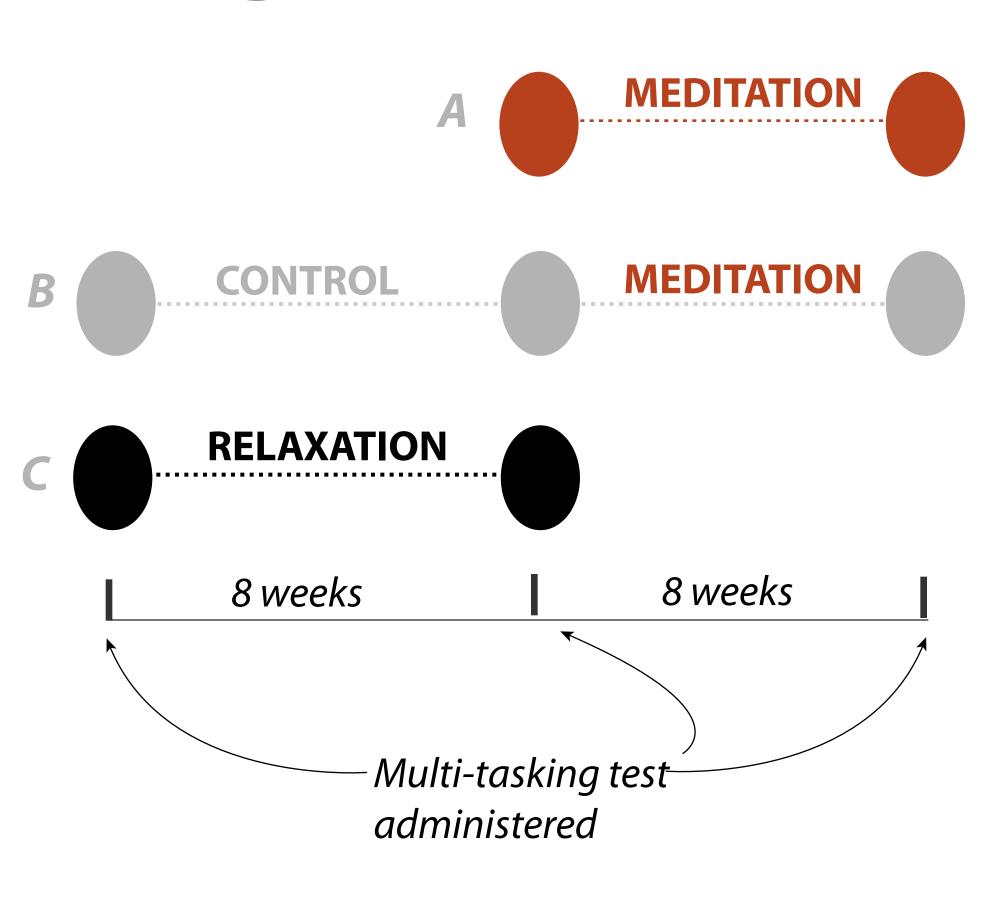
David M. Levy*, Jacob O. Wobbrock*, Alfred W. Kaszniak†, and Marilyn Ostergren*

* The Information School, University of Washington, †Department of Psychology, University of Arizona

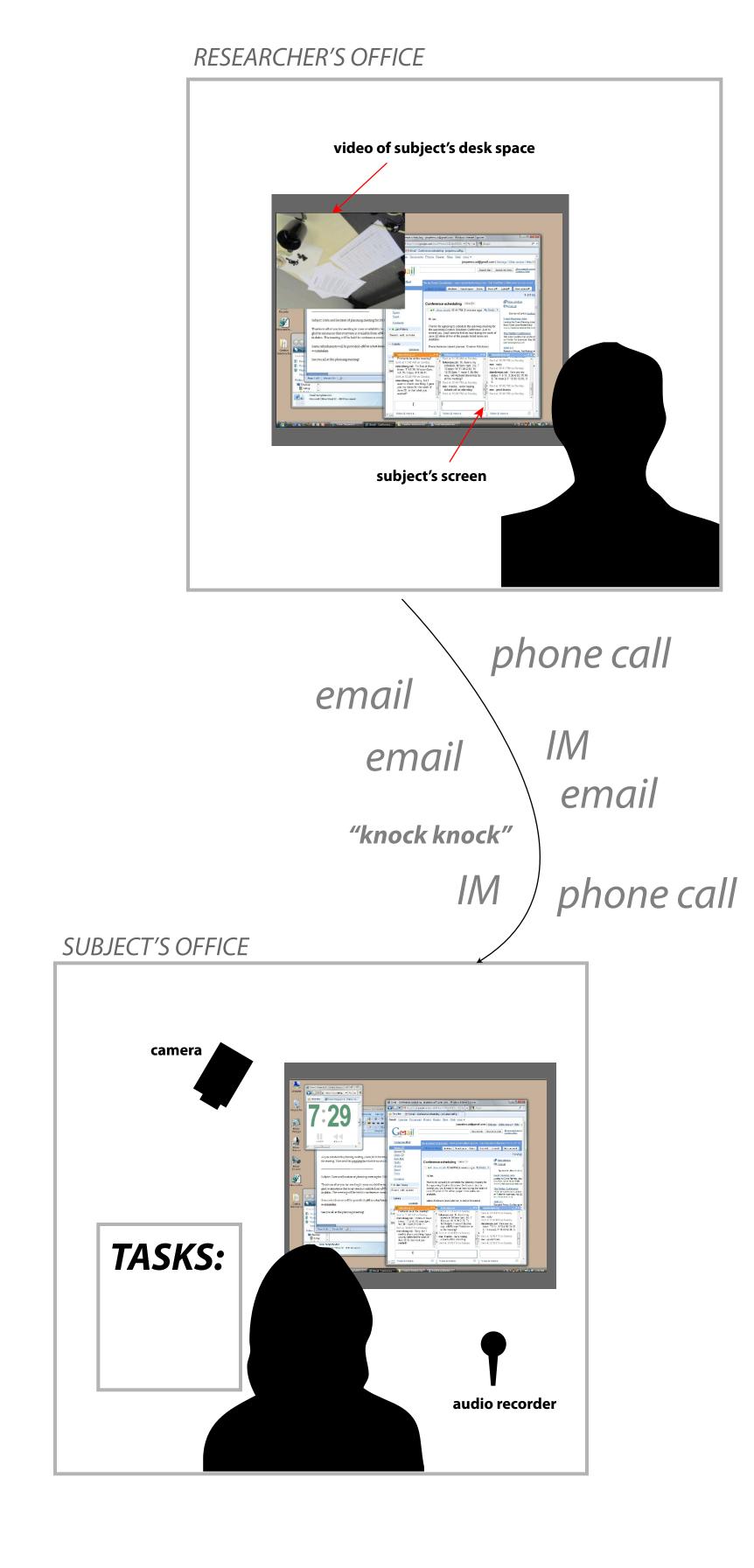
The Question

Can training in mindfulness meditation increase office workers' capacity to perform information-intensive work in an effective and healthful manner?

Experimental Design



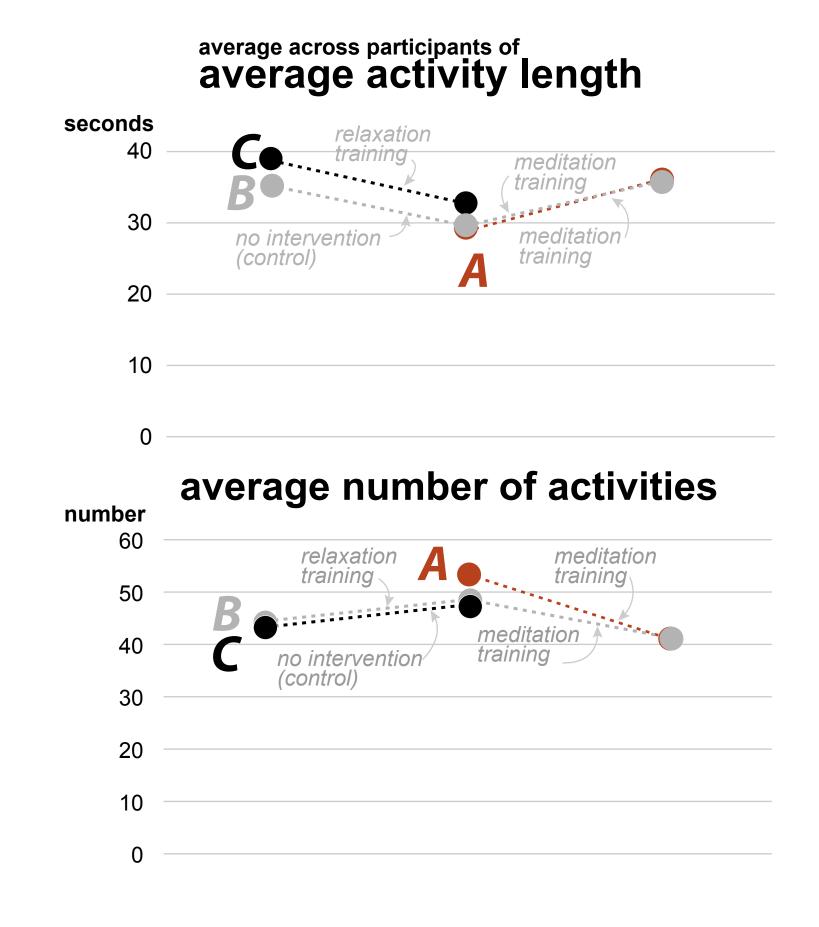
Multitasking Test



Results

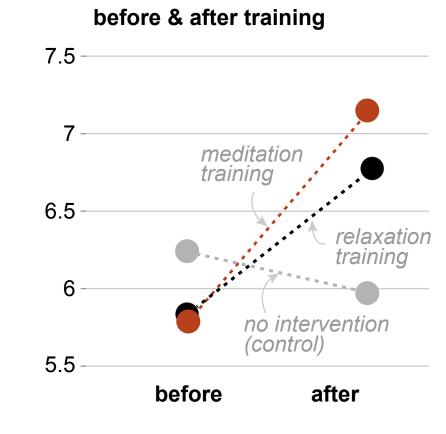
task performance/strategy

None of the groups showed post-training improvement in overall accuracy or speed, other than a practice effect. However, only the meditation group demonstrated a major change in multitasking strategy, namely, a marked tendency to spend more uninterrupted time on tasks, reducing fragmentation.



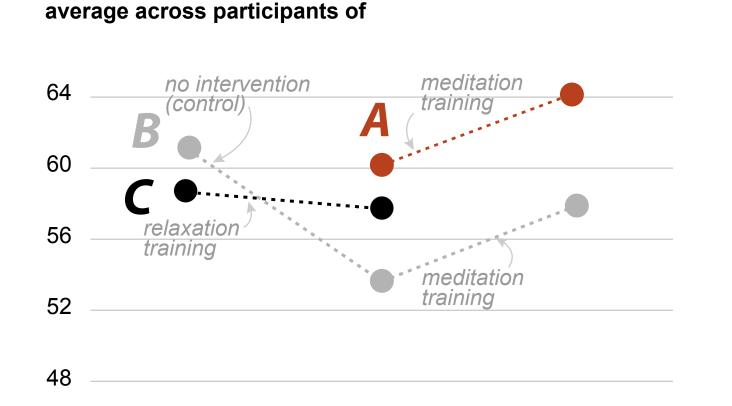
memory

Although participants in the meditation training group initially expected significantly (p=.03) less benefit than those in the relaxation or waitlist groups, they alone showed a significant memory improvement from pre-to post-training.



mindfulness

Only the meditation groups showed an increase in self-reported daily mindfulness (a measure of deliberate attention to occurrences in their daily lives).



emotional state

All participants found the test stressful, as intended. For the meditation-training group (but not for the relaxation or waitlist groups), after training there was a decrease in self-reported negative affect, anxiety/tension, and fatigue following the stressful multitasking test, and in increase in sense of vigor.

